

## Microsoft SQL Server BI: Thriving in Economic Uncertainty

### White Paper

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**Microsoft**

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## Introduction

The current economic situation presents challenges for businesses of all sizes in every industry. Around the globe, companies must cut costs and operate smarter as they confront economic stagnation, sluggish sales, and tighter lines of credit. But with challenges come opportunities. Even with limited resources, it's possible to achieve your business objectives by maintaining a long-term perspective as you take short-term steps to adjust to economic realities.

With Microsoft® SQL Server® as your data management and business intelligence platform, you can both reduce costs and empower your employees to make smarter decisions. Microsoft SQL Server helps you operate your IT infrastructure more efficiently by improving the performance and speed of your current hardware. There's no need to invest in new systems. Self-service reports and data visualizations speed the right information to the right people—without the assistance of expensive consultants. You save money and your employees make smarter, more informed decisions. Companies that choose Microsoft SQL Server increase efficiencies in the short term and position for growth in the long term.

Microsoft SQL Server and Microsoft® Office 2007 suites form the foundation for the Microsoft Business Intelligence solution, making your investment in Microsoft SQL Server the most cost-effective foundation for deploying Business Intelligence throughout your organization.

## The backdrop: uncertain economic times

In an uncertain economy, many companies feel the pinch of reduced business activity. Customer orders fall. Scrutiny for management decisions rises. As a result, it becomes increasingly important to do more with less. Internal departments, such as IT, are often the first in line for “belt-tightening” measures.

Within IT, management looks for ways to save money without compromising on quality or service. A hiring freeze or layoffs can put pressure on you to use remaining IT resources efficiently. Expensive new IT investments may be re-evaluated or even tabled. Instead, your company may seek to maximize your current hardware and software infrastructure. With the proper balance of short-term efficiency gains and long-term strategic planning, the IT department can play a significant role in helping your company survive economic hardship and get ready for the inevitable future upswing.

## The critical success factors for surviving economic uncertainty

To address the challenges of doing more with less and reducing IT costs, you need to ensure that your IT resources—from personnel to hardware and software—are as productive and efficient as possible. They must produce the valuable insights you need to manage short-term and long-term performance, while reducing the need for expensive new infrastructure. This paper addresses how Microsoft SQL Server, as a critical part of a Business Intelligence solution, can help you reduce costs and make smarter operational decisions—so you can survive, even thrive, within an uncertain economy.

### Reduce costs

Microsoft SQL Server can reduce costs in two ways. It helps you find and root out inefficiencies—such as IT backlog and slow data processing. It also saves you money by helping you maximize existing internal hardware and IT resources and reducing your reliance on expensive outside consultants.

#### **Find inefficiencies**

During difficult economic times, it is important to identify and correct inefficiencies. Three common IT inefficiencies include report backlogs, suboptimal use of hardware, and slow data warehouse processing speeds.

First, many IT departments struggle to keep up with requests for data analysis and reports. The result is often lengthy delays in producing reports, rendering the analysis in these reports outdated upon arrival. Report Builder 2.0 lets you reduce the backlog for IT reports and boost productivity by empowering your employees to create, customize, and deliver reports on their own. Self-service capabilities make it easy for employees to run personalized reports in a variety of formats—including traditional paper-based reports and interactive, Web-based, embedded, and ad hoc reports. With relevant, timely reports at their fingertips, employees make better decisions without ever involving IT.

Scandinavian Airlines (SAS) has experienced firsthand the benefits of self-service reporting. The company's new data warehouse, which is based on Microsoft SQL Server 2005, allows SAS business analysts to quickly design their own queries and reports, and use these reports to make strategic decisions that impact the bottom line. According to Per Petterson, IT Architect at SAS, "This means our business will be more responsive to changing circumstances. We will be able to take full advantage of every new business opportunity, and improve our competitive advantage. For example, by better understanding passenger loads per service, we can accelerate pricing and scheduling decisions for capacity flights."

Easing the reporting and analysis load on IT is not the only way you can improve IT efficiencies and thus reduce costs. You can also maximize your existing hardware, eliminating the need for new hardware investments. The resource governor functionality within Microsoft SQL Server lets you effectively run multiple workloads on the same machine. As a result, you can handle an increase in workload without buying additional hardware. Query optimizations and parallel processing also help you get more performance out of your existing servers and hardware. These features enable faster data warehouse load times and reduce downtime, meaning your employees are able to work with more timely data.

Reducing downtime and improving reliability can vastly impact costs. Take Accenture, for example. The company implemented a solution based on Microsoft SQL Server and SAP software, and was able to reduce administrative costs from 11.2 percent of revenue to 8.7 percent of revenue. Dan Kirner, Director of the SAP Program at Accenture, says, "The major advantages of running SAP on the Microsoft platform are a much lower total cost of ownership and greater stability and performance—the system is up 99.9 percent of the time."

### **Save money**

You can shrink IT costs by lowering data storage costs and reducing IT-related consulting fees. To lower data storage costs, use Microsoft SQL's data compression feature. It lets you store more data while generating faster IO response from the same storage device. TÜV NORD Group, one of Germany's largest technical service providers, cut its IT costs while speeding up development. "The data-compression feature in SQL Server 2008 is very, very important to us," says Sven Otromke, SAP System Manager at TÜV NORD. "SAN storage is very expensive compared to other forms of storage. So far, our average compression ratio with SQL Server 2008 has been 63 percent, so we expect that we will be able to reduce the size of our databases by almost two-thirds. This means what normally costs us about \$100,000 per year in storage will cost us only \$35,000. By compressing our databases, we can also reduce I/O, energy costs, and data center space requirements. And we'll be able to realize more efficient backup and disaster recovery strategies."

To reduce IT-related consulting fees, you can build your own internal best practices. For example, use the Microsoft SQL Server heuristic design wizards for cube, aggregation, dimension, and attribute analysis—instead of calling a consultant to do the analysis for you. The cube-based technology lets you explore and analyze data in near real-time. With access to your own OLAP database, you can run reports whenever they're needed, drilling down into detail to analyze organizational performance—and make decisions about your operations.

Hyundai Motor Company is a good example of a company that's been able to avoid expensive consulting fees by relying on Microsoft solutions. The Hyundai-Kia North American Quality

Center chose a system based on Microsoft products and technologies because development, deployment, and maintenance would cost significantly less than the alternatives. "Several companies came in trying to sell software that would cost millions to purchase and millions more to modify," says Bruce Shibuya, Vice President of the North American Quality Center. "After that, it still wouldn't be the company's application, because we would have to pay a consultant \$250,000 each year to maintain and adjust it. With Microsoft, we chose an architecture that can grow and change as we need it to."

## Operate smarter, more strategically

With a Business Intelligence solution built on Microsoft SQL Server, you not only reduce costs, you operate smarter and more strategically, building on a foundation that can support your growth when the economy picks up. With Microsoft SQL Server, you get real-time information to the right employees, so they can get their work done faster and more intelligently than ever before, while finding the most profitable customers.

### **Get real-time information to the right employees**

You want to empower employees with the real-time information they need to make better, more strategic decisions. Microsoft SQL Server lets you quickly deploy sophisticated reporting solutions and data visualization tools to the right roles. For example, customer support representatives can use customer-specific reports to identify cross-selling and up-selling opportunities. Sales directors can present compelling visual charts to prioritize their efforts around their most profitable customers and get approval for the funds they need to close those deals. With access to real-time information, your employees—those that close deals, build customer relationships, and plan for the future—can quickly analyze what's happening within the business today, and make decisions based on information that's both current and relevant.

Microsoft SQL Server lets you deploy larger and more complex reporting solutions to employees throughout your organization without additional hardware investments. The scalability of Microsoft SQL Server Reporting Services means not only are more employees accessing reports, but the reports can be produced and distributed quickly, increasing the value of Business Intelligence. For example, at GrainCorp, an Australian agribusiness, Microsoft products help push data to remote employees and speed customer response. "The IT staff can be more proactive with the Microsoft technologies that we've deployed," says Glenn Mason, Chief Information Officer for GrainCorp. "We have an environment that facilitates rapid application development, structured data, and a robust information delivery framework. On average, we've improved our new-solutions delivery time by 50 percent, which has a direct impact on the business."

LandAmerica Lender Services agrees that Microsoft solutions can increase productivity and speed report loading. "Our new application is two to three times faster than the old one," says Pat Hoover, National Sales Manager for LandAmerica Lender Services, "particularly when loading reports. You used to wait 30 seconds on the old application; on this one, the report just pops up. Our sales team provides demonstrations of our application over the Internet, and we have them going on at all hours of the day."

Reports aren't the only way to get useful information to employees. Microsoft also provides premium data visualizations through industry-leading charts, graphs, and gauges. Microsoft

SQL Server Reporting Services provides enhanced charting and reporting capabilities, so your employees can easily present data in visually compelling and interesting ways, as illustrated in Figure 1. The enhancements double the available chart types, add 2D and 3D effects, let you apply custom color palettes, and enable the fine-tuning of scales, legends, and labels. The result? Dynamic charts and graphs that improve your ability to present data, structure analysis, and make informed decisions.



Figure 1: Enhanced Charts in Microsoft SQL Server Reporting Services

### Find profitable customers

In uncertain economic times, you simply can't afford to waste precious time and resources on customers that are not in a position to buy. Microsoft provides you with access to intuitive data mining models through Excel and SQL Server so you can analyze customer profitability and focus limited resources on those customers that are profitable now—and will likely help your sales when the economy recovers.

Banca Marche Group, an Italian bank, has found that focusing on new accounts has yielded twice the profits. The easy-to-use predictive analytics part of the company's Microsoft solution has been crucial to boosting profits. Employees rely on a new workstation that uses SQL Server 2005 to grow Banca Marche Group's customer base and improve customer service quality. Corrado Faletti, Central Manager for IT Systems and Organization at Banca Marche Group, explains: "Before introducing the workstation, a branch operator typically succeeded in efficiently managing 30 to 40 of the 350 customers they were looking after. Now, each operator succeeds in managing all 350 of them in an optimum manner. Furthermore, since the commercial workstation and the Bank Data Warehouse were deployed, we have seen a significant increase in new accounts."

## The advantages of Microsoft SQL Server

Using Microsoft SQL Server as the basis for a flexible, cost-effective Business Intelligence solution enables you to reduce costs and make smarter operating decisions, increasing your chances of not only surviving, but thriving during a down economy. Choose Microsoft SQL Server as your data management and business intelligence platform and you'll get the most cost-effective, feature-rich, complete, and pervasive Business Intelligence solution available.

### Best value

Microsoft Business Intelligence solutions deliver greater value at lower cost than many competitive products—making them particularly ideal in difficult economic times. When resources are limited, leveraging what you already own is a smart, cost-effective approach. Microsoft Business Intelligence solutions provide the best value for your money by maximizing your existing IT investments and requiring only small, incremental investments in technology. And in the long run, Microsoft solutions offer lower support, training, and maintenance costs than competitive solutions. Satisfied clients tell the story best:

- “We saw Hyperion costing us \$300,000 per year more than the Microsoft solution,” says Tamy Duplantis, Vice President of IT, Potbelly Sandwich Works. “With Microsoft Business Intelligence, we are getting a full analytical solution, no compromises, and we’re saving 50 percent of what we would pay for Hyperion. That’s a tremendous deal.”
- “We have seen the TCO reduced by half when we adopted the Microsoft platform for the same delinquency tracking system that ran on Java and Oracle,” remarks Anandhi Krishnan, Assistant Vice President of Polaris Software Lab.
- “When you license SQL Server 2005, you’re getting much more than SQL Server 2005,” says Arindam Sen, Lead Database Administrator at American Power Conversion. “With SQL Server 2005, we’re getting all the mission-critical, enterprise-level performance we could want from Oracle for a fraction of the price of Oracle,” says Arindam.
- Before developing their new CarePoint system, based on Microsoft SQL Server technology, the Arkansas Children’s Hospital evaluated several third-party systems. After comparing the projected costs of the systems over a seven-year period, the hospital determined that it could develop, implement, and maintain CarePoint for less than \$2 million—which included the salaries of two full-time IT staff members to administer the system. The other systems would have cost between \$2.7 million and \$3.34 million.

### Pervasive deployment

To reap the full performance-enhancing benefits of Business Intelligence, you need a solution that is easy to use and makes your employees smarter. Business intelligence doesn’t need to be so complex that it shuts out regular business users. Nor does it need to eat up IT resources. Microsoft SQL Server has removed these barriers to usage, making Business Intelligence accessible to all your employees—from line-of-business managers to customer service reps. Because analytic reports reach more of your employees, your workforce is able to review performance daily and make more informed decisions.

### Fully integrated

In addition to providing the best value and enabling pervasive deployment, Microsoft SQL Server comes fully integrated with rest of your Microsoft Office productivity tools—including Microsoft Office Excel<sup>®</sup> 2007, Office SharePoint<sup>®</sup> Server 2007, and other Microsoft Office

applications. Microsoft SQL Server provides the data management and analysis platform, and Office PerformancePoint Server 2007 delivers powerful performance management capabilities. Because all of these products are built on the industry-leading SQL Server, they inherently work together from the beginning—not sometime in the future. Joe Gregg, the IT director for Ste. Michelle Wine Estates, explains it this way: “The Microsoft Business Intelligence solution was a natural extension to our Microsoft-based environment, so integration was easy and we were able to take advantage of much of the software—such as SQL Server and Visio—that we already had.”

## Conclusion

During periods of economic uncertainty, your organization must cut costs and make more strategic decisions, emphasizing low-risk investments that drive maximum value. Because you already own much of the Microsoft Business Intelligence solution, it's cost-effective to deploy and easy to integrate into your IT environment. Microsoft Business Intelligence can offer your organization these compelling benefits:

- **Lower total costs.** Utilize your existing investments in Microsoft SQL Server, Office SharePoint Server 2007, and Microsoft Office 2007 to drive end-user adoption, dramatically reduce per-user costs, and generate unprecedented value.
- **Empower employees to make better business decisions.** Give information workers quick access to data and enable them to perform analysis with minimal hand-holding from IT, so they can then make fast, accurate decisions.
- **Enjoy rapid deployment and faster time-to-benefits.** Promote widespread adoption and benefits with the intuitive-to-use, yet powerful Business Intelligence capabilities embedded within the everyday productivity tools your employees already use.
- **Realize powerful synergies with other Microsoft applications.** Deploy the unified communications capabilities within Microsoft Office Communications Server 2007, for example, to nimbly act on Business Intelligence-generated insights and “spread the wealth” with your co-workers, customers, partners, and suppliers.

To learn more, visit us at [www.microsoft.com/BI](http://www.microsoft.com/BI) or see a related article at <http://www.microsoft.com/sqlserver/2008/en/us/spotlight-on-cost.aspx>.

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